

Title (en)

BRIGHTNESS ENHANCEMENT METHOD AND APPARATUS OF LIGHT EMITTING DIODES

Title (de)

HELLIGKEITSVERSTÄRKUNGSVERFAHREN UND -VORRICHTUNG FÜR LICHEMITTIERENDE DIODEN

Title (fr)

PROCEDE D'ACCENTUATION DE LA LUMINOSITE ET APPAREIL A DIODES LUMINESCENTES

Publication

**EP 2064489 A4 20130724 (EN)**

Application

**EP 07843028 A 20070922**

Priority

- US 2007079254 W 20070922
- US 84651606 P 20060923

Abstract (en)

[origin: WO2008036958A2] A light source with enhanced brightness includes an angle-selective optical filter and a light emitting diode (LED) having a high reflective layer. The angle-selective filter is located on the top surface of emitting diode to pass lights at specified angles. According to one embodiment, the angle-selective filter comprises index-alternating layers. With a reflective polarizer, the light source can produce polarized light with enhanced brightness.

IPC 8 full level

**F21V 29/00** (2006.01); **H01L 33/10** (2010.01); **H01L 33/44** (2010.01); **H01L 33/46** (2010.01); **H01L 33/58** (2010.01)

CPC (source: EP US)

**H01L 33/44** (2013.01 - EP US); **H01L 33/46** (2013.01 - EP US)

Citation (search report)

- [XY] CN 1805158 A 20060719 - IND TECH RES INST [CN]
- [Y] WO 2006067885 A1 20060629 - KYOCERA CORP [JP], et al
- [A] EP 0081349 A1 19830615 - XEROX CORP [US]
- [A] WO 02061847 A2 20020808 - CREE INC [US], et al
- See references of WO 2008036958A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

**WO 2008036958 A2 20080327; WO 2008036958 A3 20081231**; CN 101529162 A 20090909; CN 101529162 B 20120111;  
EP 2064489 A2 20090603; EP 2064489 A4 20130724; EP 2064489 B1 20190102; US 2010084671 A1 20100408; US 8008694 B2 20110830

DOCDB simple family (application)

**US 2007079254 W 20070922**; CN 200780035026 A 20070922; EP 07843028 A 20070922; US 44215307 A 20070922